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SMARA UPDATE

The Quarterly Newsletter of the Department of Conservation - Office of Mine Reclamation

State Mining and Geology Board Back in Business!

Governor Gray Davis' recent appointment of Richard M. Ramirez as a member of the State Mining and Geology Board re-establishes the board's quorum, which should be good news to all those involved with mining.

The board represents the state's interest in the development, utilization and conservation of mineral resources; reclamation of mined lands; and the development of geologic and seismic hazard information. Relative to SMARA, the board certifies lead agency mining ordinances, establishes state policy for reclamation standards, serves as the appeal body for administrative penalties levied by the Department of Conservation, establishes annual reporting fees, and issues guidelines to assist mine operators and lead agencies with SMARA compliance.

Since last April, the board lacked a quorum and was not able to act on regular business brought before it either by its committees or by other interested parties. This situation occurred when the terms of two board members expired, and the appointments of three others were withdrawn from consideration by the Senate Rules Committee, a common occurrence following a change in administrations. This left the board with five vacancies and four members, one short of the required five members for a quorum. Board members are appointed by the governor for four year-terms and must be confirmed by the state senate.

In its quorum-less state, the board continued to function at the committee level and to prepare business for a full board to act upon once a quorum was again established. Committee meetings continued to be held every month.

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OMR to Publish Lead Agency Contact List

The Office of Mine Reclamation is assembling a list of lead agency contacts and will be distributing it to all lead agencies by mail in late November. The list will identify the primary SMARA contact for each lead agency and provide the name, mailing address, phone number, facsimile and e-mail address (if available) of each contact. The list will be updated and redistributed on an annual basis thereafter and will also be downloadable from the department's web page.

This effort is being undertaken by OMR as a means of fostering improved communications between lead agencies regarding SMARA issues and information. We believe that the sharing of ideas and information will benefit both lead agencies and operators by helping to make administration of the act more efficient and equitable from one jurisdiction to the next.

Due to the changes in staffing, area codes/phone numbers and addresses, we anticipate that some of the information in the list may become outdated during the year. As this occurs, we ask your help as users of the list to keep us updated

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State Mining and Geology Board Back in Business!

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With a quorum established, the board intended to clear its "backlog" of business at its meeting on November 10 (see the Executive Officer's Report for a summary of the meeting results).

One of the most pressing issues has been to certify the revised surface mining ordinances for 23 lead agencies (12 cities and 11 counties) that had been recommended by the board's joint committee. In addition, the board has been acting as the SMARA lead agency for 34 cities and 10 counties that have either no SMARA ordinance, or their ordinances are deficient and have not been re-certified by the board. Other SMARA issues to be addressed by the board were the adoption of revised *Guidelines for Classification and Designation of Mineral Lands*, and the acceptance of several mineral land classification updates.

Mr. Ramirez resides in Glendale and is currently a consultant and engineering geologist at Professional Geological Services. From 1980 to 1992 he served as chief engineering geologist and chief executive officer for California Geo/Systems, Inc. in Burbank. Mr. Ramirez is a registered geologist and certified engineering geologist. He is also a member of the Association of Engineering Geologists and the Geological Society of America. Mr. Ramirez earned a Bachelor of Science degree from the University of New Mexico. He fills the public member's seat on the board.

The four seats that remain vacant are designated for: a representative of local government with background and experience in urban planning; an individual with background and experience in mineral resource conservation, development and utilization; an individual with background and experience in groundwater hydrology, water quality and rock chemistry; and a landscape architect.

The department is looking forward to having an active board and is especially pleased that so many lead agencies will once again have certified ordinances and the accompanying ability to fully implement SMARA.

Glenn Stober,
Assistant Director

It is estimated that there may be more than 30,000 abandoned and inactive mine locations in the state. If you know of or find an abandoned mine please call and report it to the Abandoned Mine Lands Unit. The toll free number for reporting an abandoned mine is:

1-877-OLD MINE

Remember to stay out and stay alive!

OMR to Publish Lead Agency Contact List

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of any changes by faxing or e-mailing the new information to this office. Our fax number is (916) 322-4862 and our e-mail address is omrcal@consrv.ca.gov.

Andrew Rush,
Environmental Specialist

Best Management Practices for Reclaiming Surface Mines

Editor's Note: This article is excerpted from Best Management Practices for Reclaiming Surface Mines In Washington and Oregon, Open File Report 96-2 published by Washington State Department of Natural Resources and Oregon State Department of Geology and Mineral Industries.

Maps as Management Tools

Continuing with the theme from Part 1 of this article in the last edition of the *SMARA Update*, there are a number of basic elements that should be included on any mining or reclamation map. They include:

Topographic Contours - Topographic contours are lines on a map that connect points of equal elevation. For example, a 100-foot

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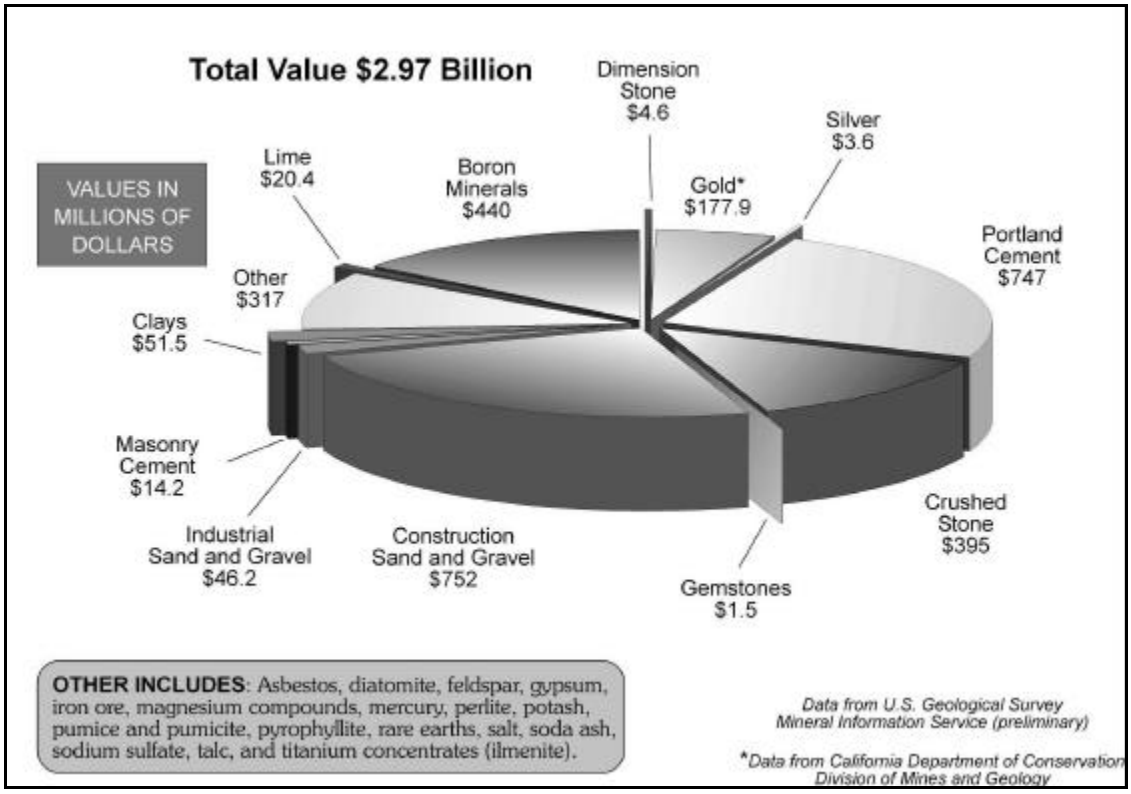
California Non-Fuel Minerals – 1998

Editor's Note: This is an abridged version of an article written by Susan Kohler-Antablin, Associate Geologist with the Department of Conservation, Division of Mines and Geology. The full article appears in the September/October 1999 edition of California Geology Magazine published by the DMG.



Based on the U.S. Geological Survey's preliminary data, in 1998 California ranked second among the states in non-fuel mineral production, accounting for approximately 7 percent of the United States total. Mineral production for California amounted to $2.97 billion, about a 2 percent decrease from 1997. Production of at least 25 different types of industrial minerals accounted for about 94 percent of the total value, with metals accounting for 6 percent of the total. California was the only producer of boron, rare earth concentrates and asbestos, and continued to lead the nation in the production of sand and gravel, portland cement, diatomite and natural sodium sulfate. California ranked second in the nation in gold production. Other minerals produced in California include bentonite clay, common clay, dimension stone, crushed stone, feldspar, fuller's earth, gemstones, gypsum, hectorite clay, iron ore, kaolin clay, lime, magnesium compounds, mercury, perlite, potash, pumice, pyrophyllite, salt, silver, soda ash, talc, and ilmenite. There are almost 1,000 active mines producing non-fuel minerals in the state. Approximately 11,000 people are employed in the mining industry.

At $2.97 billion, California's 1998 non-fuel mineral production ranked second among the states accounting for approximately 7 percent of the nation's total non-fuel mineral production.

Construction sand and gravel was California's leading industrial mineral with a total value of $752 million produced for 1998, a 12.6 percent increase from 1997 final data. Total sand and gravel production increased by about 11 million tons or 8.7 percent. CalMat Company's Sheldon/ Peoria operation (Los Angeles County) was the largest producer of sand and gravel in the state and nation. Portland cement was the second largest industrial mineral produced in the state with a total production of 11.7 million tons valued at $747 million. Boron, valued at $440 million, ranked third in value for the state, and crushed stone ranked fourth with a value of $395 million.

Inspection Workshop was "Kinda Fun"

The SMARA inspection workshop held in late September at the Lighthouse Lodge & Suites in Pacific Grove on the Monterey Peninsula was "exceptional" according to Alan Falleri, chief planner for the County of Mendocino. Another participant, Desmond Johnston, with Merced County had this to say, "A difference between this workshop and other training seminars I've attended is the presenters. With OMR staff there is no posturing, impressing, marketing and rushing through issues the staff are not comfortable with. This workshop was hands-on, real, pertinent and kinda fun too."

Tim Kustic illustrates how to use a Brunton Compass

The workshop was well attended with 35 participants representing 22 counties, 7 cities and 1 consultant. Topics covered during the two-day class included minimum inspection requirements, tips on preparing for and conducting inspections, personal safety, inspection techniques for slope stability, erosion control, revegetation and habitat restoration, and tips for reviewing cost estimates and the new surety bond form.

As with last year's inspection workshop, the highlight of the training was a field trip to an active mining operation. This year's workshop participants visited Granite Construction Company's Del Monte Quarry, which overlooks the Pacific Ocean. During the field trip, participants conducted practical field exercises at three separate stations located in different areas of the quarry. These exercises included measuring slope angles, bearings and heights using a clinometer and Brunton compass, determining the stability of a benched slope and estimating vegetative cover, density and species-richness.

> *A difference between this workshop and other training seminars I've attended is the presenters. With OMR staff there is no posturing, impressing, marketing and rushing through issues the staff are not comfortable with. This workshop was hands-on, real, pertinent and kinda fun too.*
>
> *Desmond Johnston, Merced County*

A certificate of appreciation was awarded to Steve Grace of Granite Construction Company for volunteering the Del Monte Quarry for the field trip and assisting OMR staff in preparing for the workshop.

Mary Ann Showers discusses vegetative monitoring techniques

The success of this workshop was due in large part to the ability of participants to visit an active mining operation. We are in the initial stages of planning another inspection workshop for the Southern California region next year. We are looking for an operator willing to volunteer a site in either the Los Angeles or Inland Empire areas for the 2000 workshop. Any operator able to assist us in this effort is asked to contact Andrew Rush at (916) 323-9198.

Steve Grace (right) receives a certificate of appreciation from Andrew Rush

Andrew Rush, Environmental Specialist

Executive Officer's Report

At its November 10, 1999 regular business meeting held in Sacramento, the board took the following actions on these SMARA issues. This was the first SMGB meeting since March 13, 1999, the board having lost its quorum at the end of March.

1. The board certified new surface mining and reclamation ordinances for 26 cities and counties. These new certifications are the result of the board's program to encourage lead agencies with pre-1991 ordinances to bring their ordinances into accordance with current SMARA.

2. The board approved a request from 2-Way Mining Company for an exemption from the requirements of SMARA for a limited surface mining operation in Kern County. The granting of the exemption was supported by the county. The proposed mining operation must still obtain permits from the county and other affected agencies.

3. The board adopted revised Guidelines for Classification and Designation of Mineral Lands. These guidelines were last revised in 1983, and partially revised in 1994. This was the first full revision since that time. The guidelines provide information to the state geologist and the Division of Mines and Geology (DMG) regarding the standards and criteria to be employed by DMG during the classification and designation processes.

4. The board accepted three DMG mineral land classification reports. These reports are: Open File Report 99-02, Update of Mineral Land Classification, Aggregate Minerals in the Fresno Production-Consumption Region, California; Open File Report 99-01, Update of Mineral Land Classification, Aggregate Materials in the Monterey Bay Production-Consumption Region, California; and, Open File Report 99-09, Mineral Land Classification, Portland Cement Concrete-Grade Aggregate and Clay Resources in Sacramento County, California.

5. The board accepted the mineral resource management policies of Santa Clara County that have been incorporated into the county's general plan.

6. The board accepted the revised 5-year schedule by DMG for conducting SMARA mineral land classification projects as provided by PRC Section 2761.

7. The board found that, pursuant to PRC Section 2774.5, the surface mining ordinances for the lead agencies of the City of San Bernardino, and the Counties of Modoc, Santa Clara, Tulare, and Yuba are deficient and not in accordance with current SMARA. These lead agencies were notified of the SMARA requirements to update their ordinances according to a SMARA timetable.

John G. Parrish, Ph.D.
Executive Officer

Best Management Practices for Reclaiming Surface Mines

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contour line links all points that have an elevation of 100 feet. Although not required on all maps (e.g. site access map), contours are useful in determining the steepness of slopes and the location of watercourses. Contours are deemed adequate for mine permitting if they accurately reflect the conditions of the site. Generally, contour intervals should be between 5 and 20 feet.

Boundaries - Several types of boundaries may be required on maps: the permit area boundary, the mining area boundary (including present and future mining areas), and the property lines. The symbols for all should be included in the explanation block.

Permit Area Boundary - This is the boundary within which mining is permitted. Any mining, processing, or activity related to mining taking place outside this area constitutes mining without a permit and may invoke closure and/or civil penalties. In some places, the permit boundary may be coincident with the property boundary. However, the permit boundary may cross property lines and can include property held by different landowners. Once the boundary has been defined, changes to it typically require an amendment to the permit or reclamation plan and may require land-use approval by the local jurisdiction. The permit boundary is commonly indicated on maps as a dashed or solid line.

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Reclamation Tips

What is a Weed?

All of us have a concept of what a weed is. We can picture oxalis or spurge in our lawns, nutsedge in our flower gardens, and star thistle in foothill fields. What about ice plant growing in a coastal dune system? Or eucalyptus in riparian corridors? Or pampas grass on a hillside? Simply put, weeds are plants growing in the wrong place. On a more serious level, they are often highly invasive and difficult to control or eradicate; they can out-compete more desirable plants; and they often create a fire hazard. We often refer to non-native, introduced species as exotics. Many of them, however, are truly noxious weeds.

SMARA requires that native species be used for revegetation except when introduced species are needed to meet the end use specified in a reclamation plan. For example, use of exotic (non-native) species is appropriate in areas to be developed for industrial, commercial, or residential use, or when needed for erosion control. Non-native forage species are appropriate when a mine is reclaimed to pasture. Similarly, reestablishment of crops on agricultural land also entails the use of non-native species. The control and eradication of weeds in agricultural areas is a primary focus of the pesticide industry and biological control proponents. Monetary costs associated with weed control in agriculture are enormous.

Weed introductions into native habitat result not only in monetary costs for control but ecological costs as well. Millions of dollars are spent annually by public agencies to control and eradicate weeds such as French broom, giant reed, and tamarisk. Ecological costs are more difficult to quantify, but relate to loss of nesting and foraging sites for birds, depression of the water table in desert riparian systems, and elimination of valuable wetland and marsh habitat. Mustards and thistles not only eliminate browse for native grazing animals, but also limit human access to wildland settings.

Careful selection of reclamation plants will result in a successful revegetation effort and minimal effort (and costs) for weed control and eradication. If inappropriate species are used for erosion control or revegetation, they can outcompete desired plants or spread into adjacent habitat. Two examples of aggressive weeds are pampas grass and Tasmanian blue gum. In coastal settings, these plants will readily spread to surrounding areas, and wind will transport the seeds of pampas grass miles from the parent plant. Use of some exotic species for erosion control can also limit or preclude the success of the revegetation effort. For example, rye grass is often proposed for erosion control. It is inexpensive and seed is easy to obtain. However, it produces toxins that inhibit the germination of other seeds, and it produces a dense thatch – a distinct fire hazard.

Revegetation should use only native species *found in the project area* when reclamation will be to open space or wildlife habitat. If commercial seed is used, the seed should be collected from the general project area at a similar elevation and on similar substrates. This approach will ensure a seed mix composed of species adapted to the project area. Many native species can also be used for erosion control. Look for these species along access roads or in disturbed areas. Examples of such native species are California buckwheat, sagebrush, rubber rabbitbrush, chia, and apricot mallow.

Much useful information on noxious weeds can be obtained from:

California Exotic Pest Plant Council (CALEPPC). This non-profit group focuses on weeds that are serious problems in wildlands. This site can be found at www.caleppc.org

California Interagency Noxious Weed Coordinating Committee. This multi-agency group offers news, policy information, and program reports on weed control and eradication. Email: noxtimes@cdfa.ca.gov. Or visit the CalWeed database at http://endeavor.des.ucdavis.edu/weeds

The Nature Conservancy. TNC produces reports on wildland weeds. Available at http://www.tnc.org

Mary Ann Showers,
Environmental Specialist

Best Management Practices for Reclaiming Surface Mines

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This line type and width should be distinguishable from the property line boundary and should be clearly labeled as "permit boundary".

Mining Boundaries - Mining boundaries show the areas to be mined or excavated. Several maps may be needed to show areas affected by short-term and long-term operations.

Boundaries of Cities and Counties - Boundaries of cities, counties, and other municipalities should be shown if they cross the map area.

Property Lines - Tax lot maps from the county assessor's office are good sources of property line information. Property line locations are critical in determining setbacks to property lines and the likelihood of potential impacts to adjacent landowners. The property line boundary is typically shown on maps as a solid line. The property line type and width should be distinguishable from the permit boundary line and should be clearly labeled. The letters "PL" are commonly used to indicate a property line on maps, but this line and abbreviation should also be identified in the explanation block.

Financial Assurance Tips

The ABCs of Letters of Credit

The roots of letters of credit can be traced back as far as the 12th century. They were created to facilitate trade by reducing a merchant's risk of losing his gold to highway robbers while providing a "paper" currency of stable liquidity. Their use increased dramatically after World War I when European countries were buying heavily from U.S. manufacturers. In 1933, the International Chamber of Commerce (ICC) adopted the Uniform Customs and Practice for Documentary Credits which is a practical and comprehensive set of 49 rules that address the major issues in documentary credit usage. The Uniform Customs and Practice for Documentary Credits (currently referred to as UCP 500) is amended by the ICC about every ten years and was last updated in 1993. California regulates the use of letters of credit through the Uniform Commercial Code, Division 5, Sections 5101 through 5117.

Just what is a letter of credit? In the context of SMARA's financial assurance requirements, the functional definition of a letter of credit is any arrangement, however named or described, whereby a bank (the "issuing bank") acting at the request and on the instructions of an applicant (the operator) is to make a payment to or to the order of a beneficiary (the lead agency/ DOC) upon the presentation of certain document(s), provided that the terms and conditions of the letter of credit or arrangement are complied with. Based on this then, what gives the letter of credit value is the fact that the issuing bank is pledging its own funds to the lead agency with the promise to pay if the operator fails to reclaim the mine site according to the approved reclamation plan.

Typically the issuing bank will protect itself from loss by requiring the operator sign an indemnity and hold harmless agreement and provide some form of cash equivalent collateral before issuing the credit.

Generally speaking there are two types of letters of credit: commercial credits which support the sale of goods under a contract and standby credits which serve to reduce the risk of nonperformance under an agreement that calls for performance. Obviously, the standby credit is the type of credit that should be used to comply with SMARA's financial assurance requirement. Most letters of credit are also referred to as documentary credits because they require the beneficiary to present a draft or demand for payment accompanied by other documents supporting the draft to the issuing bank before payment will be made. The types of supporting documents to be submitted are called out in the body of the letter of credit. Using the letter of credit form recommended in the State Mining and Geology Board's Financial Assurance Guidelines (Appendix D) as an example, the supporting documents for a lead agency's

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Financial Assurance Tips

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draft would be the original letter of credit and an appropriately completed demand statement using the language stipulated in the credit.

Commercial and standby credits may also be issued as either revocable or irrevocable. The issuing bank can cancel revocable credits at almost any time and for almost any reason, therefore lead agencies should only accept standby letters of credit that clearly denote they are irrevocable.

Another aspect unique to letters of credit is that they are independent of the underlying transaction or agreement they are supporting or guaranteeing. This means that no matter what happens in the relationship between the operator and lead agency, the relationships between the issuing bank and the operator and the issuing bank and the lead agency are unaffected. This makes it difficult for either the operator or the lead agency to influence or affect the issuing bank's actions in its relationship with the other party. For example, the operator could not prevent the issuing bank from honoring the lead agency's demand for payment if the lead agency's presentation documents conform to the terms and conditions of the letter of credit.

While a letter of credit may be administratively easier for a lead agency to review than a surety bond, it has certain characteristics provided for under law that lead agencies should be aware of. First and foremost is the precise nature in which the lead agency's presentation documents must be prepared and submitted to the issuing bank. Any discrepancy from the terms and conditions stipulated in the credit, however minor, may give cause for the bank to reject the presentation.

Timing is another issue of great importance, for once a letter of credit has expired the issuing bank is exonerated of its duty to honor the credit. According to the UCP 500, the issuing bank has up to seven working days to examine the presentation documents. If the credit's expiration date falls within those seven days and the bank rejects the beneficiary's presentation for nonconformance with the terms and conditions of the credit at the end of the seventh day, the beneficiary will most likely be out of luck! It is absolutely critical that a lead agency allows time to correct any deficiencies that may be found in its presentation documents before the letter of credit expires.

Unless otherwise called out in an agreement between the parties or in the letter of credit itself, the liability of the issuing bank for its actions or omissions is governed by the law of the jurisdiction in which the issuing bank is located (the sample letter of credit recommended by the SMGB includes language stipulating that California law is the governing law). Therefore lead agencies should give careful consideration to accepting a letter of credit from an issuing bank located outside of California and especially if the bank is located outside of the United States. Similarly, if the letter of credit requires that the lead agency submit its sight draft and documents at the counters of the issuing bank, the lead agency may find it difficult to complete its presentation requirements in a timely fashion if the bank is located outside of California.

Finally, a letter of credit is like cash or any other document with intrinsic value. It should be stored in a safe place with controlled access and should not be altered or defaced in any way (i.e. writing on it or hole punching it). Doing so may be reason for the bank not to honor it. A lead agency storing an operator's letter of credit in the public file risks having the credit stolen and fraudulently submitted for payment. According to credit law, the issuing bank's review of the presentation documents is limited to determining if the documents, on their face, meet the credit's terms and conditions. If so, the Issuing Bank must honor the demand. If such an event were to happen, the operator may have legal recourse to force the lead agency to compensate him for his loss. And last but not least, it is standard practice to require that the original letter of credit be included with the presentation documents… SO DON'T LOSE IT!

Fortunately it is rare that a lead agency must rely on an operator's financial assurance to complete reclamation. When releasing a letter of credit, the lead agency should return the original credit to the issuing bank (via certified mail with return receipt requested) with a cover letter that includes a statement releasing the lead agency's interest in the credit. A copy of the lead agency's cover letter should be forwarded to the Office of Mine Reclamation.

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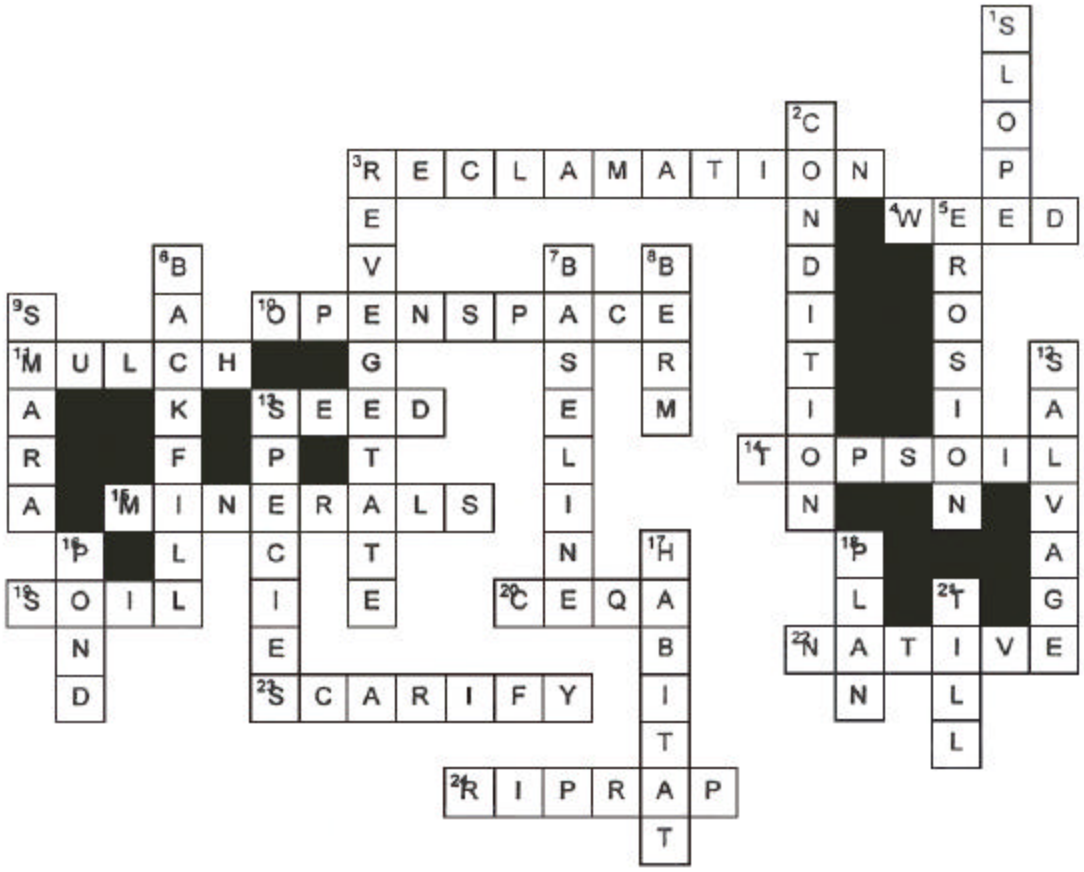
Mine Reclamation Crossword Puzzle

Editor's Note: Sorry to have spoiled your fun in the last edition by publishing a crossword puzzle that was puzzling even to the experts. This editor takes full responsibility for any expletives that may have resulted from our error.



Across

3. Land rehabilitation process
4. Undesirable plant
10. Natural setting end use
11. Organic groundcover
13. Plant ovule
14. Soil rich in humus
15. Naturally occurring inorganic compounds
19. Growth media
20. PRC, Division 13, Section 21000
22. Indigenous
23. To roughen the ground surface
24. Protective armoring

Down

1. Incline
2. A permit stipulation or requirement
3. Replant
5. Process of wearing away
6. To replace material in an excavation
7. A standard reference condition or point
8. Dirt levee
9. California statutes for surface mine reclamation
12. Save for later use
13. Classification of plants and animals
16. Small body of water
17. Physical environment of a plant or animal
18. Detailed scheme
21. Plow

Financial Assurance Tips

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In some instances, the issuing bank may also require that OMR provide a release statement. In such cases, the lead agency should advise OMR of the bank's request and a letter will be sent directly from this office.

Andrew Rush,
Environmental Specialist

The *SMARA Update* is a quarterly publication of the Department of Conservation's Office of Mine Reclamation, 801 K Street, MS 09-06, Sacramento, California 95814, (916) 323-9198. Our web site address is http://www.consrv.ca.gov/omr. The purpose of this publication will be that of imparting the latest in reclamation tips, as well as changes in legislation or interpretation of existing statutes by court decisions.

Director: Darryl Young
Chief Deputy Director: Steve Arthur
Deputy Director: Pat Meehan
Assistant Director for OMR: Glenn Stober
Newsletter Editor: Andrew Rush

Editor's Note: Although this office strives to publish the SMARA Update on a quarterly basis, we were unable to publish an edition for this summer. We apologize for any inconvenience or confusion this may have caused.

Department of Conservation
OFFICE OF MINE RECLAMATION
801 K Street, MS 09-06
Sacramento, CA 95814